

【Inquiries】

AsahiKASEI Engineering Plastics Information Comprehensive Site

URL : <https://www.asahi-kasei-plastics.com/en/contact/>

AsahiKASEI



TENAC™-C HC590

Asahi Kasei Corporation - Acetal (POM) Copolymer

Tuesday, March 19, 2024

General Information

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features AKEP website	• Food Contact Acceptable		
Uses	• Cosmetics	• Non-specific Food Applications	
Agency Ratings	• EU 10/2011		
Processing Method	• Injection Molding		
Part Marking Code (ISO11469) (ISO 11469)	• >POM<		

Other Documentation

Literature	• Molding Conditions • SDS • Technical Handbook
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ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	15	g/10 min	ISO 1133
Molding Shrinkage - Flow	1.6 to 2.0	%	Internal Method
Water Absorption (24 hr, 23°C, 50% RH)	0.20	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2850	MPa	ISO 527-1
Tensile Stress (Yield)	67.0	MPa	ISO 527-2
Nominal Tensile Strain at Break	33	%	ISO 527-2
Flexural Modulus	2700	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	6.0	kJ/m ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	105	°C	ISO 75-2/A
CLTE - Flow	1.0E-4	cm/cm/°C	ISO 11359-2
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.75 mm)	HB		UL 94

Disclaimer:

- Data shown are typical values obtained by proper testing methods and should not be used for specification purpose. Please use these data for selecting the most appropriate grade suitable for specific usage.

These data may be changed because of improvement in properties.

- Be sure to read the relevant SDS before handling and use, and always follow the Important Precautions.

- Do not use plastics in any of the following orally- or medically-related applications.

- Orally-related applications: any part, device or component which may come into direct oral contact or into direct contact with drinking foods or beverages.

For drinking water application, please consult Asahi Kasei Corporation.

- Medically-related applications: any part, device or component which may be used intracorporeally or which may in dialysis or other processes come into direct or indirect contact with body tissue, body fluids or transfusion fluids.

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Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	80 to 90	°C
Drying Time - Hot Air Dryer	3.0 to 4.0	hr
Processing (Melt) Temp	180 to 210	°C
Mold Temperature	> 60	°C

Notes

¹ Typical properties: these are not to be construed as specifications.

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